

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 02 DEC 2005



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Applicant's or agent's file reference PCA40635-KIT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/KR2004/001635	International filing date(day/month/year) 02 JULY 2004 (02.07.2004)	Priority date (day/month/year) 02 JULY 2003 (02.07.2003)
International Patent Classification (IPC) or national classification and IPC IPC7 A01N 37/44		
Applicant KOREA RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY et al		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
- a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
- ☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
- b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 02 MAY 2005 (02.05.2005)	Date of completion of this report 28 SEPTEMBER 2005 (28.09.2005)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer JUNG, Jin Wook Telephone No. 82-42-481-8293 

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001635

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☒ This report is based on translations from the original language into the following language English which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☒ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
pages 1 - 41 as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☒ the claims:
pages _____ as originally filed/furnished
pages* _____ as amended (together with any statement) under Article 19
pages* 42, 43 received by this Authority on 02 / 05 / 2005
pages* _____ received by this Authority on _____
- ☐ the drawings:
pages _____ as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☒ the claims, Nos. 2, 4
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/KR2004/001635

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 3	YES
	Claims	None	NO
Inventive step (IS)	Claims	1 - 3	YES
	Claims	None	NO
Industrial applicability (IA)	Claims	1 - 3	YES
	Claims	None	NO

2. Citations and explanations (Rule 70.7)

This statement is based on the amended claims 1-3 filed with the letter of 02/05/2005.

The present invention relates to a fungicidal composition comprising the compound either of Formula I or II and a specific adjuvant. It further claims a method for preventing or treating a plant disease by spraying that fungicidal composition.

1. Novelty

The subject matter of the present claims 1-3 is novel over the prior art cited in the International Search Report and meets the criteria set out in PCT Article 33(2), because none of the prior art describes the specific adjuvant selected from the group consisting of a nonionic surfactant selected from the group consisting of: a polyoxyethylene-based nonionic surfactant which has an aliphatic alcohol, a fatty acid or triacyl glyceride containing at least 8 carbon atom as a lipophilic moiety and a polyoxyethylene having 3 to 25 oxyethylene repeating units as a hydrophilic moiety; a polyoxyethylene-polyoxypropylene block copolymer containing 2 to 40 oxyethylene and 25 to 45 oxypropylene repeating units and a mixture thereof; an anionic surfactant selected from the group consisting of sodium dioctyl sulfosuccinate, sodium dodecylbenzenesulfonate and a mixture thereof; and fatty acid alkyl esters having at least 14 carbon atoms recited in the present claims.

See Supplemental Box for the next parts.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

V.

2. Inventive Step

The subject matter of the present claims 1-3 complies with PCT Article 33(3), since the prior art including the documents cited in the International Search Report does not teach or fairly suggest the specific kinds of agrochemicals and adjuvants and the specific mixture ratios of the ingredients to enhance the fungicidal efficacy of both methyl (2E)-3-methoxy-2-[2'-[[[3''-(1'''-fluoro-2'''-phenyl-1'''-ethenyloxy)phenyl]methyylimino]oxy]methylphenyl]propenoate and N-methyl (2E)-2-methoxyimino-2-[2'-[[[3''-(1'''-fluoro-2'''-phenyl-1'''-ethenyloxy)phenyl]methyylimino]oxy]methylphenylacetamide by increasing the foliar uptake and spray deposition of the fungicidal compounds of formula I and II to crop plants; and to make stable fungicidal compounds when formulated.

3. Industrial Applicability

Claims 1-3 also meet the criteria set out in PCT Article 33(4) and consequently, these claims are considered to be industrially applicable.

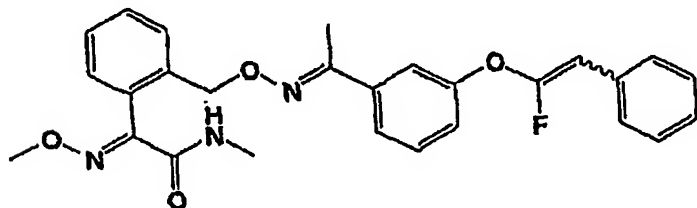
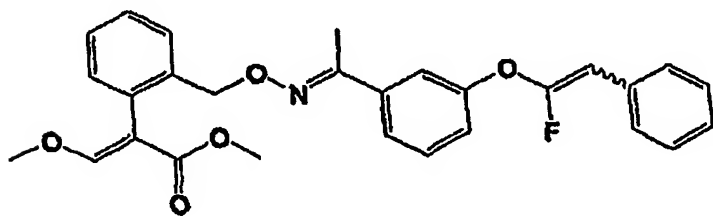
What is claimed is

1. The fungicidal composition, which comprises:

(i) an agrochemical selected from the group consisting of methyl (2*E*)-3-methoxy-2-[2'-[[[3''-(1'''-fluoro-2'''-phenyl-1'''-ethenyloxy)phenyl]methylimino]oxy]methylphenyl]propenoate of formula (I); *N*-methyl (2*E*)-2-methoxyimino-2-[2'-[[[3''-(1'''-fluoro-2'''-phenyl-1'''-ethenyloxy)phenyl]methylimino]oxy]methylphenylacetamide of formula (II) and a mixture thereof, and

(ii) an adjuvant for enhancing the fungicidal efficacy of the agrochemical, selected from the group consisting of: a nonionic surfactant selected from the group consisting of a polyoxyethylene-based nonionic surfactants which has an aliphatic alcohol, a fatty acid or triacyl glyceride containing at least 8 carbon atoms as a lipophilic moiety and a polyoxyethylene having 3 to 25 oxyethylene repeating units as a hydrophilic moiety; a polyoxyethylene-polyoxypropylene block copolymer containing 2 to 40 oxyethylene and 25 to 45 oxypropylene repeating units and a mixture thereof; an anionic surfactant selected from the group consisting of sodium dioctyl sulfosuccinate, sodium dodecylbenzenesulfonate and a mixture thereof; and fatty acid alkyl esters having at least 14 carbon atoms;

said agrochemical and said adjuvant being mixed in a ratio range from 1:0.5 to 1:20 by weight.



2. The composition of claim 1, which further comprises another agrochemical for preventing or treating plant diseases.

3. A method for preventing or treating a plant disease, which comprises spraying the fungicidal composition of claim 1 or 2 at a concentration of 4 to 400 mg/l of the agrochemical or 50 to 2,000 mg/l of the adjuvant to said plant.

AMENDED SHEET (ART. 34)